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| |  |  | | --- | --- | | For Examiner’s Use | | | Examiner’s Initials | | | Question | Mark | | **1** |  | | **2** |  | | **3** |  | | **4** |  | | **5** |  | | **6** |  | | **7** |  | | **8** |  | | **9** |  | | **10** |  | |  |  | |  |  | | **TOTAL** |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Centre number** |  |  |  |  |  | **Candidate number** |  |  |  |  | | **Surname** |  | | | | | | | | | | | **Forename(s)** |  | | | | | | | | | | | **Candidate signature** |  | | | | | | | | | | | **Programming Language** | **VB.Net (7517/1E)** | | | | | | | | | |   **A-LEVEL COMPUTER SCIENCE** |
| **Paper 1** |

Predator Prey Mock 2017

Morning

Time allowed: 2 hour 30 minutes

Instructions

* This is the Electronic Answer Document (EAD). Answer **all** questions by entering your answers into this document on screen. You **must save** this document at regular intervals.
* Before the examination begins, type the information needed in the boxes **at the top of this page**.
* Before the examination begins, type the information needed in the boxes **in the footers** (page 2 onwards) of this EAD.

**During the examination**

* You may print pages of your EAD. A print monitor will collect and deliver your print-out to you. You must **not** collect your own print-out.

**Exceptions**

* If you experience difficulty inserting screen shots into your EAD then you may print these separately and attach to the back of the EAD with a reference in the correct place in the EAD. Ensure that your **Centre Number**, **Candidate Name** and **Candidate Number** are on each sheet.

**At the end of the examination**

* Save for the last time and print your EAD on one side only (not double-sided). A print monitor will collect and deliver your print-out to you. Check that your details are in the footers of every page. Write them in if they are not.
* Enter your signature on the front cover.
* Staple or tie all pages together in the top left-hand corner of the EAD.
* Hand in **all** pages of the EAD to the Invigilator.

**Warning**

* No extra time is allowed for printing and collating.
* It may not be possible to credit an answer if your:

– details are not printed on every page as instructed above

– screen captures are not legible to the Examiner.

Answer **all** questions.

You **must save** this document at regular intervals or you may lose your work.

**Section A**

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| **Question 01** | | | | |  |  |
| **0** | **1** | **.** | **1** |  | |  |
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| **Question 02** | | | | |  |  |
| **0** | **2** | **.** | **1** | |  |  |  | | --- | --- | --- | | **Original state** | **Input** | **New state** | | S3 |  |  | | S3 |  |  | | |  |
| **0** | **2** | **.** | **2** |  | |  |
| **0** | **2** | **.** | **3** | |  |  | | --- | --- | | **Rule number**  **(given in Figure 2)** | **Could be defined using a regular expression** | | 1 |  | | 2 |  | | 3 |  | | 4 |  | | 5 |  | | 6 |  | | |  |
| **0** | **2** | **.** | **4** |  | |  |
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| **Question 03** | | | | |  |  |
| **0** | **3** | **.** | **1** |  | |  |
| **0** | **3** | **.** | **2** | |  |  | | --- | --- | |  |  | | **Vertex (in Figure 3)** | **Adjacent vertices** | | 1 |  | | 2 |  | | 3 |  | | 4 |  | | 5 |  | | |  |
| **0** | **3** | **.** | **3** |  | |  |
| **0** | **3** | **.** | **4** | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  | **Cat** | | | | **NoOfCats** | **A** | **B** | **C** | **1** | **2** | **3** | **4** | **5** | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | | |  |
| **0** | **3** | **.** | **5** |  | |  |
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| **Question 04** | | | | |  |  |
| **0** | **4** | **.** | **1** |  | |  |
| **0** | **4** | **.** | **2** |  | |  |
| **0** | **4** | **.** | **3** |  | |  |
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| **0** | **4** | **.** | **6** |  | |  |
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| **0** | **4** | **.** | **8** |  | |  |
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| **Question 05** | | | | |  |  |
| **0** | **5** | **.** | **1** |  | |  |
| **0** | **5** | **.** | **2** |  | |  |
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**Section B**

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| **Question 06** | | | | |  |  |
| **0** | **6** | **.** | **1** |  | |  |
| **0** | **6** | **.** | **2** |  | |  |
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**Section C**

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| **Question 07** | | | | |  |  |
| **0** | **7** | **.** | **1** |  | |  |
| **0** | **7** | **.** | **2** |  | |  |
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**Section D**

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| **Question 08** | | | | |  |  |
| **0** | **8** | **.** | **1** |  | |  |
| **0** | **8** | **.** | **2** |  | |  |
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| **Question 9** | | | | |  |  |
| **0** | **9** | **.** | **1** |  | |  |
| **0** | **9** | **.** | **2** |  | |  |
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| **Question 10** | | | | |  |  |
| **1** | **0** | **.** | **1** |  | |  |
| **1** | **0** | **.** | **2** |  | |  |
| **1** | **0** | **.** | **3** |  | |  |
| **1** | **0** | **.** | **4** |  | |  |
| **1** | **0** | **.** | **5** |  | |  |
| **1** | **0** |  | **6** |  | |  |
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**If you have made any separate screen captures, put a reference in the correct place in this Electronic Answer Document.**

**Ensure that your Centre Number, Candidate Name and Candidate Number are on each sheet.**

**Attach them to the back of this document.**

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